

REMARKS

In the Office Action, the Examiner rejected Claims 1 and 5-15 under 35 U.S.C. 102 as being fully anticipated by U.S. Patent 6,845,432 (Maiyuran, et al.). The Examiner objected to Claims 2-4 and 16-19, where were all of the other pending claims, as being dependent upon rejected base claims, and the Examiner indicated that these Claims 2-4 and 16-19 would be allowable if appropriately rewritten.

Claim 2 is being rewritten in independent form, including the limitations of Claim 1, and Claim 10 is being amended to include a feature described in original Claim 16. Claim 16 itself is being rewritten in independent form including the limitations of original Claims 10, 13, 14 and 15, and Claim 19 is being rewritten in independent form including the limitations of original Claim 10. Claim 1 is being cancelled; and Claims 5, 7, 8 and 9 are being amended to be dependent from Claim 2 instead of Claim 1.

For the reasons set forth below, all of Claims 2-19 are now in condition for allowance. The Examiner is thus asked to reconsider and to withdraw the rejection of Claims 5-15 and the objections to Claims 2-4 and 16-19, and to allow Claims 2-19.

More specifically, Claim 2 is being rewritten in independent form including all of the limitations of Claim 1. It is believed that this places Claim 2 and Claims 3-9, which are now all dependent from Claim 2, in condition for allowance without further amendment or argument. The Examiner is, accordingly, requested to reconsider and to withdraw the objections to Claims 2-4 and the rejection of Claims 5-9, and to allow Claims 2-9.

Claim 10, as mentioned above, is being amended to include a feature originally described in Claim 16. In particular, as amended herein, Claim 10 describes the step of determining an optimum size for the cache for balancing power and performance given a set of

power and performance criteria.

As it is believed the Examiner has recognized, this feature is a significant, non-obvious advancement in the art, that is neither shown in nor suggested by Maiyuran, et al. or any of the other references of record.

In particular, Maiyuran, et al. describes a low power cache architecture comprised of a set of modules. To reduce power consumption, each module may be powered down independently of the other modules. Maiyuran, et al. does not teach or suggest the feature of determining an optimum size for the cache for balancing power and performance given a set of power and performance criteria.

As explained in the present application, this feature is of utility because it allows sections of the cache to power down to minimize power consumption, while not impacting performance when, for example, high performance is required.

The other references of record have been reviewed, and these other references, whether considered individually or in combination, also do not disclose this feature of the present invention.

In view of the differences between Claim 10 and the prior art, and because of the advantages associated with those differences, Claim 10 patentably distinguishes over the prior art and is allowable. Claims 11-15 are dependent from, and are allowable with, Claim 10. Accordingly, the Examiner is also asked to reconsider and to withdraw the rejection of Claims 10-15 under 35 U.S.C. 102, and to allow these claims.

With respect to Claim 16, this claim is being amended to include all of the limitations of the base claim, which was original claim 10, and the intervening claims, which are Claims 13, 14 and 15. It is hence believed that this places Claim 16 and Claims 17 and 18, which are

dependent from Claim 16, in condition for allowance without further amendment or argument.

Claim 19 was originally dependent directly from Claim 10, and Claim 19 is being rewritten in independent form including the limitations of that original claim 10. It is thus believed that Claim 19 also now is in condition for allowance without any further amendment or discussion.

In view of the above, the Examiner is asked to reconsider and to withdraw the objection to Claims 16-19, and to allow these claims.

In the Office Action, the Examiner also asked that if the independent claims are rewritten, Applicant make any necessary amendments to the title, the summary and the abstract to bring them into harmony with the allowed claims. Applicants' Attorneys have carefully reviewed these parts of the application, and they are all consistent with the allowed claims.

For the reasons advanced above, the Examiner is asked to reconsider and to withdraw the rejection of Claims 5-15 and the objection to Claims 2-4 and 16-19, and to allow Claims 2-19. If the Examiner believes that a telephone conference with Applicants' Attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

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